

White Paper: The Global Medieval Sourcebook
Grant HAA-258712-18

By Kathryn Starkey (PI) and Mae Velloso-Lyons (Project Manager and General Editor)

I. Overview and Goals

Our project, the Global Medieval Sourcebook, was built to provide a curated online anthology of medieval literary and cultural material which would bring together works from diverse traditions for the first time, offering a newly global view of text production between 600 and 1600 CE. It aimed to be accessible to a wide audience and suitable for use in a high-school or university classroom setting. As all texts were to be offered in their original language and in new, scholar-produced English translations, the site also aimed to serve researchers carrying out comparative projects.

The proposed technical approach comprised a Drupal website, including a custom Drupal module which would connect our site to pages generated through an open-source software called Versioning Machine; the aforementioned Versioning Machine software, which generated dynamic parallel panels which we used to display our text content; custom TEI-XML templates which we adapted from examples provided by Versioning Machine so as to be able to display a wide range of text forms and layouts. We also proposed a more sophisticated image integration system than that offered by Versioning Machine.

The goals which were approved in our grant application were to develop the pedagogical features offered by the site, carry out user testing and evaluation, and roadmap a way to make the site sustainable going forward. The basic pedagogical features we proposed to develop were: improved image integration, audio recordings, custom print-ready PDFs. The advanced pedagogical features we proposed to develop included user-generated curation of subsets of texts from the repository, which could be shared or saved as private collections (e.g., as a digital course reader for teaching, or as a personal research archive).

The targeted and actual dates of completion for each of these task areas were as follows:

- **Basic pedagogical features**
Target completion date: March 2018. Actual completion date: see explanation of change in approach, below.
- **Advanced pedagogical features**
Target completion date: June 2019. Actual completion date: see explanation of change in approach, below.
- **User testing and evaluation**
Target completion date: Three rounds, concluding in May 2019. Actual completion date: June 2020. See discussion in "Accomplishments", below.
- **Roadmapping sustainability**

Target completion date: May 2019. Actual completion date: the roadmapping process concluded in October 2020, with implementation underway since July 2020 and due to conclude in spring 2021.

Changes in approach

As discussed in our interim report of November 2018, the unexpected departure of Technical Lead Mike Widner necessitated a change of approach: the technical goals we had articulated in our initial application had aligned with his skillset, and until a replacement was hired (six months later), no technical progress could be made. During this interim period without a Technical Lead, the site was hacked; our new Technical Lead, Quinn Dombrowski, spent much of her budgeted time for the project on the rebuild and migration to a new hosting platform. Taken together, the delay that we incurred as a result of these factors was eight months. Additionally, our new Technical Lead (whose hiring we were not involved in) had a markedly different approach to scholar-led digital humanities projects: one focused on minimal computing and sustainability. This meant that several features we had hoped to implement, or had begun to implement, were no longer feasible, including: custom PDF generation; a custom Mirador module for image display in Versioning Machine; a mobile version of the site (rather than a mobile-compatible main site); secure spaces on the site for user-led curation. We also faced the prospect of being unable to secure continued financial or institutional support for our project website when significant infrastructural intervention would be required given the imminent obsolescence of Drupal 7. At the same time, Dombrowski brought experience and vision to questions of preservation and access, which allowed us to make unexpectedly rapid progress on another of our goals: roadmapping a sustainable future for the project.

Given these changes, we pivoted towards a site that would offer pedagogical features not in the form of technologies but carefully curated online content and well-designed downloads. This meant leaning on our scholarly expertise rather than on our technical know-how, as we curated Collections (described in the November 2018 interim report) and expanded our guidance for text introductions. We also elected to design print-ready PDFs of our texts in the form we deemed most useful for classroom use, sacrificing custom generation for stability and feasibility. The turn towards greater creation of material also entailed more active work on increasing the diversity of material (linguistically, geographically, ideologically, and in terms of religious traditions represented) to ensure that the site could serve as an exemplary microcosm of the Global Middle Ages, instead of an open-ended archive. We therefore chose to limit the number of texts published on the website to approximately 100, and to ensure that each had complete introductory material and that our downloadable TEI and PDF files would contain adequate contextualizing project information. We believe that this pivot provides better value for money for taxpayers by drawing on the expertise of team members and results in a stable and accessible product, instead of expensively outsourcing technical work that would be hard to preserve for future users.

II. Accomplishments

Our major activities in this final period of the grant have been: continuing to solicit and process new material from under-represented languages in order to ensure a diversity of content in each curated

Collection; preparing for accession of our products to the Stanford Digital Repository by creating metadata for MODS records (MARC records will subsequently be created from the MODS records by the SDR team); designing the static site and creating a work plan for building and testing it; preparing PDF templates and using them to generate print-ready versions of all texts on the site; writing and revising a forthcoming article on our experience building and maintaining the GMS to enable other scholars to draw upon the lessons we've learnt, especially concerning project life cycles and preservation.

The accomplishments made in each of the task areas outlined in the initial application are discussed below.

Pedagogical features

As discussed above, this was an area where we were forced to modify our approach in light of personnel change and a hack of our website. Our pivot towards a model whereby the content, rather than the platform, is the site of pedagogical value yielded the following major accomplishments: the publication of more than 70 texts and new English translations to date (with approximately 20 forthcoming), accompanied by new introductory materials composed by scholars; the curation of five thematic Collections with culturally diverse contents, plus additional Collections with a narrower linguistic or generic focus. The thematic collections are: "Love Songs of the Medieval World: Lyrics from Europe and Asia", "Prayer, Spirituality, and Life after Death: Global Medieval Perspectives", "Gender, Sex, and Sensuality: Writings on Women, Men and Desire", "Writing History: Chronicles, Legends and Anecdotes", "Cross-Cultural Encounters in the Medieval World" (forthcoming). Additional collections include Chinese *ci* (song lyrics) from the Song Dynasty, Old High German writings, fables, and jokes.

These materials will continue to be available online on our website (see "Roadmapping Sustainability", below) but are also designed to be easily portable to course readers or course websites, which is why we created our own print layout for each text which can be downloaded as a PDF or printed. The markup of all of our texts in TEI-XML and the publication of these files (on our static website, forthcoming in spring 2021, and through the online catalogue of Stanford's Digital Repository) will facilitate the teaching of these texts in courses incorporating digital humanities methods such as text mining. The growth in such courses has meant an increased demand for such resources in recent years, yet medieval texts in an appropriate digital format for digital analysis have been in short supply. In this way, our project has yielded both an online learning resource and a set of pedagogical resources that support diverse approaches to the teaching of medieval culture.

User testing and evaluation

The aforementioned personnel change meant that our first round of user testing (assessing the page clicks of undergraduate students) became unfeasible. Instead, we sought feedback from fellow teachers and researchers in two presentations (one in Germany, one in the USA, both May 2018), and we tested the use of the site in a teaching setting (an undergraduate course taught by Velloso-Lyons, April-June 2020). We also solicited informal feedback in our exchanges with potential contributors and with colleagues who used the site's resources for teaching, as well as through the comment form on the site. This feedback informed the design of our new, static project website, our approach to cataloguing our

output for the purposes of the Stanford Digital Repository and WorldCat, and our design of the downloadable content for the static site.

Roadmapping sustainability

Through a collaboration with Stanford University Libraries (SUL), specifically the Stanford Digital Repository (SDR), we have begun to implement an agreement to accession our scholarly output (our published texts and translations, as well as their metadata) to SDR for long-term hosting and preservation. This agreement will make these publications findable through both the SUL digital search and through WorldCat, as each of our Collections will have its own MARC record. Preparation of the metadata required to generate MODS records for each individual text (which will make them findable at that level of granularity in the SUL catalogue) is now complete, and we will move into an accessioning phase once our remaining forthcoming texts are published (expected by end of January 2021). The SDR catalogue pages for each item will include both PDF and XML versions of the text with its translation which will be available for any internet user to view and download.

Alongside our preservation of our digital publications, we have planned a static Jekyll website which will replace our current Drupal website (with its custom linkage to HTML generated through Versioning Machine). The structure of this site has already been decided and we have cloned a model that we will begin to modify in January. Work on this is being undertaken by Dombrowski, Velloso-Lyons, and Smith, and is scheduled to be complete by March 2021 for launch (following testing) in May 2021. This new web presence will display information about the project, the list of texts published, as well as a page for each text with its current introductory materials and the XML and PDF versions for download. The main difference for the user will be the absence of Versioning Machine's semi-dynamic display. While this was a key part of our early project, as we worked to diversify our text content to include non-Western material, we increasingly ran into cases which could not be adequately formatted using Versioning Machine. We eventually concluded that continuing to use Versioning Machine was in tension with showcasing a rich range of premodern written cultures: our primary pedagogical aim.

III. Dissemination of Results

The results of our project were disseminated via numerous channels targeting different audiences. For academic audiences who might use our project as a resource for research and teaching, or to replicate the preservation strategies that we developed in their own digital humanities projects, we wrote a peer-reviewed article which is forthcoming in the journal *Seminar* (entitled "The Global Medieval Sourcebook: Creating a Sustainable Digital Anthology of Medieval Texts and Translations"). More targeted communications with scholars in medieval studies took place via email: we used university web pages to identify scholars to introduce the project to, and we also made use of sub-field specific mailing lists where we knew of them through our networks. A primary challenge when promoting our project is that it presents primary source material from many different language traditions, so scholars likely to use it could be in any number of language or region-focused departments (e.g., Middle Eastern Studies), hence the need for a proactive approach. We also submitted the GMS to the Medieval

Academy of America's Medieval Digital Repository so that it would be findable through a highly trusted field-specific portal.

Other strategies for dissemination included a Twitter account which we used to announce new publications to the website, allowing us to reach a broader public. We also regularly advertised for undergraduate interns through Stanford's Center for Spatial and Textual Analysis (CESTA). These internships offered students in a range of majors (including STEM) to develop a deeper interest in humanities research and build professional experience.

IV. Participants

NB: The person-month totals given below cover the extended grant period of May 2018 to May 2020.

Kathryn Starkey, Principal Investigator, 17 person-months

Contributions included defining the overall direction for the project; managing budget and personnel; overseeing project promotion; outreach to potential collaborators. Salaried at Stanford University except for one month of funding through the NEH grant. Resident of California.

Mae Velloso-Lyons (formerly Lyons-Penner), General Editor, 8.5 person-months

Contributions included managing content acquisition and review; collaborating with PI on overall project direction; training and managing research assistants; revising and annotating TEI templates; encoding texts in TEI markup; designing PDF templates. This position was primarily funded through the NEH grant with additional funding through Kathryn Starkey's personal research funds and a grant from the Stanford University Humanities and Sciences Dean's Office. Resident of California.

Quinn Dombrowski, Technical Lead, 0.6 person-months

Contributions included rebuilding site following hack; guidance on static site build, preservation options, and cataloguing; general bug fixing. No funding came through the grant for this position, which was salaried at Stanford University. Resident of California.

Mike Widner, Technical Lead (to 2018), 0 person-months within the grant period

Contributions included original website build, including custom Drupal module for Versioning Machine software; guidance and training on Versioning Machine templates; customization of Versioning Machine templates; general bug fixing. No funding came through the grant for this position, which was salaried at Stanford University. Resident of California for the duration of contributions to the project.

Danny Smith, Project Manager, 0 person-months within the grant period

Contributions included management of publication calendar; liaising with contributors through publication process; encoding texts in TEI-XML; preparation of metadata for MODS records; management of social media. This position was funded through a grant from the Stanford University Humanities and Sciences Dean's Office. Resident of New York.

Daniel Bush, Technical Assistant, 0 person-months within the grant period

Contributions included general bug fixing; additional support for technical lead Mike Widner; technical support for project interns. This position was funded through Kathryn Starkey's personal research funds. Resident of California.

Johannes Junge Ruhland, Outreach and Acquisitions, 0.4 person-months

Contributions included targeted outreach to potential contributors and liaising with contributors through the early stages of the publication process. Primarily funded through Kathryn Starkey's personal research funds, but one third funded through the NEH grant. Resident of California.

Lora Webb, Outreach and Acquisitions, Outreach and Acquisitions, 0.4 person-months

Contributions included targeted outreach to potential contributors and liaising with contributors through the early stages of the publication process. Funded through Kathryn Starkey's personal research funds. Resident of California.

Staff Member Last Name	Staff Member First Name	Title or Role	Institution	State or Territory	Country
Starkey	Kathryn	Principal Investigator	Stanford University	California	USA
Velloso-Lyons	Mae	General Editor	Stanford University	California	USA
Dombrowski	Quinn	Technical Lead	Stanford University	California	USA
Widner	Mike	Technical Lead	Stanford University	California	USA
Smith	Danny	Project Manager	Stanford University	New York	USA
Bush	Daniel	Technical Assistant	Stanford University	California	USA
Ruhland	Johannes Junge	Outreach and Acquisitions	Stanford University	California	USA
Webb	Lora	Outreach and Acquisitions	Stanford University	California	USA

V. Impact on the Discipline

The academic field which our project speaks to most directly is Medieval Studies, which is itself an interdisciplinary area of inquiry, spanning history, art history, literature, languages, religious studies, and archeology. Recent years have seen a "global turn" in this field, whereby scholars have started to focus on the connections and exchanges between concurrent pre-modern societies, rather than treating them in isolation. This has the advantage of exposing cultural interdependencies and patterns of influence which were previously indiscernible, while also unseating Europe as the "center" of the medieval world (an unwarranted status which dominated the anglophone academy until recently). This shift towards a paradigm of a "Global Middle Ages", in which Arabic and Chinese sources are granted the same attention as Latin works, and all three can be discussed alongside each other, necessitates new pedagogical resources and guidelines, and new research tools for scholars. The GMS responds to these needs by curating new English translations of short but rich texts from around the world which are ideally positioned for integration into a course reader. Likewise, the introductory framings of texts and the curated reading suggestions provide briefings for both teachers and for researchers seeking to get to grips with unfamiliar traditions.

The selection of texts that we have published on the website has been specifically curated to showcase genres which are generally overlooked by the Academy, such as jokes, nuns' biographies (*vitae*), historical anecdotes, unusual retellings of well-known stories, anonymous love songs, etc. This means that our project brings new material into the realm of what can be studied, researched, or taught, providing an open-access archive of texts for future inquiry. This is especially valuable during the current pandemic when non-digital archives are largely inaccessible, but it will remain a unique resource even when traditional archives reopen because of its curation of so-called "minor" works in an accessible format.

Another recent trend in the field has been the production of digital scholarly editions. Our environmental scan showed that there was an absence of digital "facing page"-style editions with translations. Our adaptation of the open source Versioning Machine software to fulfil this task has resulted in an easily duplicated system of dynamic digital display in "facing page"-style panels. In this way, our project has contributed to fomenting new standards for digital edition and translation projects. This will be supported by our explicit discussion of this issue in our forthcoming journal article (see "Products of the Project", below).

One final area of impact on the field of medieval studies was as a venue for publication of transcriptions and translations. Our project allowed scholars from the full range of professional stages, from graduate students to full professors, to receive a publication credit and disseminate their work to a wider audience. (We also published some translations by undergraduate researchers, but these were undertaken under the supervision of more senior scholars.) Finding venues for the publication of translations is often difficult as "argument-led" publications are preferred by university presses and scholarly journals, so creating a new publication venue specifically for short translations validated a form of scholarship that is universally acknowledged to be critical to the field of medieval studies yet is often excluded by journals and presses.

VI. Impact on Other Disciplines

As mentioned in the previous section, there are far more digital edition projects than there are edition-translation projects, so the GMS provides an instructive example for scholars hoping to undertake such a project for textual sources from their own areas of specialization. Given the linguistic and cultural breadth of the project, we also serve as a proof-of-concept for comparative or cross-cultural projects. The dynamic project website, which will be taken offline in spring 2021, has also demonstrated the viability of Versioning Machine being used to display texts and translations—rather than for its intended purpose: to display variants of the same source—as well as certain limitations of doing so (for example, where the original language version and the translation are very different in length, or where a particular text has formatting requirements which go beyond LTR/RTL and line breaks).

As a scholar-led digital humanities project which has sought to actively manage its own transition into a static, minimally-maintained form, the GMS offers a model for other projects looking to conclude without majorly diminishing the ongoing accessibility of their previous outputs. We hope that our project can exemplify the benefits of collaboration with a research library or digital repository for preserving and cataloguing scholarly products and for maintaining their digital findability. We also see our forthcoming static website as contributing to a wave of projects taking a minimal computing approach to their online presence in order to focus on scholarship and access. Finally, by contributing to a growing field of scholar-led public humanities projects, our project helps to validate this emergent form of scholarly labor and its relevance to the profession.

VII. Impacts on Teaching and Education

The project has created new teaching resources including edited medieval texts and translations, thematic collections of medieval texts, and introductory materials for the study of medieval text cultures across the world. It also facilitates comparative approaches in teaching by presenting primary materials in curated cross-linguistic thematic collections, as well as providing a search function that enables teachers to compile their own collections around a particular theme. The website design, with its highlighting function and parallel texts additionally promotes active engagement with the texts, and a dynamic use of the resource.

The translations and introductions are high quality resources prepared by specialists in the respective field. They are thus an excellent resource for researchers wanting to expand their work across languages and cultures.

The seven undergraduate research assistants and eight graduate assistants who worked on our project learned how to prepare a digital scholarly edition and conduct TEI markup. They also gained experience in independent research and translation. The project further introduced these students to Digital Humanities work for the first time.

VIII. Impacts on Non-specialists

The project provides accessible resources for independent study. It offers a diverse and global perspective on medieval textual culture, and it presents texts that were not previously accessible to a broader audience. The scholarly research is presented in a form accessible to a lay audience, and the introductory texts direct further enquiry through suggested readings. As a whole, the project facilitates greater understanding of the sophistication and complexity of non-Western cultures, and of the diversity within Western cultures.

IX. Presentations and Events

Early in the grant period, team members gave two presentations of the project to scholarly audiences as a means of both promoting it and receiving feedback to guide the new phase of development. These were:

- A presentation entitled “The Global Medieval Sourcebook”, part of a roundtable entitled “Thinking Long Term About Digital Editions”. Delivered at the 53rd International Medieval Congress, Western Michigan University (Kalamazoo, MI), May 2018. Approximately 30 attendees, including one team member, one contributor, and one advisory board member.
- A presentation at the University of Freiburg, May 2018. Approximately 40 attendees, including one team member.

X. Challenges and Problems Incurred

As reported in the November 2018 interim report and in "Overview and Goals: Changes in approach", above, we incurred an unexpected personnel change in March 2018 and a website hack in summer 2018 which set certain aspects of the project back by at least eight months, and forced us to modify two of our four goal areas. While the ensuing changes in approach are discussed in the aforementioned section of this report, there were also consequences for our budget. Given the substantial delays to progress, we were required to seek additional funding for the period following the end of the grant period, which we had not initially anticipated. We were fortunately able to secure a one-off grant from the Stanford University Humanities and Sciences Dean's Office, but the use of Project Director/Principal Investigator Kathryn Starkey's personal research funds was also necessary for interim expenditures. An additional challenge was the requirement that NEH funds be used as salary, which meant that graduate students on the project, who often faced legal restrictions on salaried work (e.g. because of their immigration status), needed to be paid out of other funding sources.

XI. Acknowledgements of Support

The primary product of our project was a website, which acknowledges the support of the NEH with a logo incorporated into the footer of every page on the Drupal site, and a further statement (with a link to the NEH website) on the "Sponsors" page. These will be retained as we build our static successor site, scheduled to go live in spring 2021.

Other products of the project include: our Github repository, which shares our site code; our TEI-XML files which describe the primary source material and the scholarly translations published on the site; our printable PDF versions of the same texts and translations; our promotional Twitter account. All four of these make reference to the NEH support.

XII. Project Outcomes

- The project allowed us to develop and expand the website, which had been started with no financial or institutional support. It also helped us to acquire matching support from Stanford University.
- Over the course of the award period, we published more than forty texts from eighteen different contributors, and brought the total number of languages represented in the repository to twenty. We are on track to publish just short of 100 texts by spring 2021.
- We published texts never before available in English or considered comparatively, and in doing so we created a valuable teaching resource to be used in university (and possibly also highschool) instruction.
- We also were able to collaborate with our library to preserve our publications, keep them accessible to all, and increase their findability online.
- We provided internships and training in various Digital Humanities approaches, as well as research in the Humanities to seven undergraduate students, and several graduate students.
- We also produced a peer-reviewed article to be published in the journal *Seminar*.

XIII. Products of the Project

The project generated a number of different products, most notably the website (<https://sourcebook.stanford.edu>); the successor to the current site will have the same URL. Other products include the code available through our Github repository (<https://github.com/medieval-source-book>) and the XML and PDF files for the texts published on the website, all of which will be available to download by spring 2021 from both the Stanford Digital Repository and the website. We will return to the NEH grant management interface to submit links to these once they go live. Another product is a forthcoming article in the journal *Seminar*: Mae Velloso-Lyons, Kathryn Starkey, and Quinn Dombrowski, "The Global Medieval Sourcebook: Creating a Sustainable Digital Anthology of Medieval Texts and Translations". Copies of this article will be submitted to the NEH upon its publication. Finally, we have received coverage from a number of media outlets:

- www.coinsweekly.com/en/News/Online-compendium-makes-medieval-texts-accessible/4?&id=5109&utm_source=newsletter&utm_medium=email&utm_campaign=CoinsWeekly+11.01.2018&newsletter=CoinsWeekly+11.01.2018

- <http://news.stanford.edu/2017/08/04/bringing-medieval-texts-contemporary-audience/>
- <https://hyperallergic.com/394758/global-medieval-sourcebook-stanford>